flexible access structure, as described below, would facilitate the introduction of new

process which has delayed new service approval in the past.[18]

While some may argue that individual freedom to establish rate structures may result in increased complexity to national customers, access competitors have already introduced additional rate structures with no apparent detriment to the industry. In the competitive marketplace, the service provider that offers the best service and terms will be successful. A flexible access structure would enable customers to request and receive offerings that best meet their individual requirements. Competition naturally produces a variety of customer options and eliminates those variations that do not benefit the customer. It would be counterproductive for LECs to make the terms and conditions specifying their access service offerings unnecessarily complex or difficult for customers to understand. To the extent issues arise with respect to the consistency of rate structures proposed by LECs, these issues can best be dealt with through intercompany negotiation or industry standards forums rather than prescriptively through the rigid, costly, and time-consuming regulatory process.

C. Access Services Pricing Reform

The degree of regulation should be premised upon the level of competition in a particular market area. As discussed in Section II, the Commission has already established that study area segmentation is permissible. The Commission allows LECs to segment study areas into zones comprised of wire centers possessing similar traffic density characteristics. As access markets become increasingly competitive, an additional dimension that takes into account market competitiveness is needed. USTA proposes that this can be accomplished by establishing a three tier market structure of IMAs, TMAs and CMAs. Varying levels of pricing flexibility would be afforded according to the availability of alternative supply and the apparent willingness of customers to utilize it. To further respond to customer needs, USTA proposes revisions to the current price cap rules.

1. Market Area Classification

For those companies which have elected to establish zones, each zone would be designated an IMA. For those companies which have elected not to establish zones, each study area would be designated an IMA. IMAs will be the starting point from which LECs may elect to create new market areas. For each IMA, the LEC may establish a

[18] USTA recommends that, on an interim basis, the Commission permit new services to be established without a waiver until the reforms contained within this proposal are implemented.

corresponding TMA. As wire centers within an IMA satisfy the behavioral criterion demonstrating emerging competition, they may be assigned to the TMA.

The behavioral criterion used to identify those wire centers that may be included in a TMA is the presence of substitutable services from another source, such as a CAP, cable company, interexchange carrier, private carrier, or microwave carrier within the geographic area served by the wire center. While there are a number of ways LECs can demonstrate the availability of competitive alternatives, the presence of expanded interconnection in a wire center will automatically satisfy this criterion.[19] Because of the cross-elastic nature of access services, all services originating or terminating within these wire centers would be included in the TMA.

As each wire center satisfies additional competitive criteria demonstrating aggressive competition, it may be designated as a CMA. The behavioral criteria used to certify a wire center as a CMA are:

1. Customers in the geographic area served by the wire center can obtain an alternate source of supply for at least 25% of the incumbent LEC's existing access services demand or 20% of the total market demand;

and

2. Customers in the geographic area served by the wire center who represent at least 25% of the incumbent's access services demand, or a single customer accounting for at least 15% of access services demand, actively seek to reduce the cost of their access services through the solicitation of bids, private networks or construction of their own access facilities.

By satisfying both criteria for certification as a CMA, the LEC will have demonstrated that the customers in the geographic area served by the wire center have available alternative supply and have exhibited a willingness to shift their demand.[20]

Additional criteria are necessary which are sensitive to the economic characteristics

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[19] The presence of expanded interconnection is sufficient but not necessary to demonstrate the presence of substitutable services in a wire center. For example, alternative suppliers serve customers without purchasing expanded interconnection. Alternative suppliers also serve customers in the serving area of one wire center by purchasing expanded interconnection in a different wire center.

[20] LECs may satisfy the criteria for CMA designation for all access services originating or terminating within a wire center. Optionally, LECs may satisfy the CMA criteria for access services originating or terminating within a wire center for one or more access categories/baskets.

of certain LECs.[21] The Commission recognized that in order to achieve the desired effects, regulatory reforms must be "applied with sensitivity to [small and medium sized LECs'] special circumstances."[22] For example, an alternative supplier could readily begin providing service in an adjacent LEC's territory. For small or medium sized LECs, severe financial harm would likely result from the loss of a single customer.

Therefore, USTA proposes that non-Tier 1 LECs may elect to assign a wire center to a TMA or to certify a wire center as a CMA on the basis of adjacency. The adjacency criteria are as follows:

1. The geographic area served by the wire center is adjacent to the geographic area served by a wire center that satisfies the applicable behavioral criteria for TMA or CMA certification.[23]

and

2. The proposed market area classification for the adjacent wire center must be equivalent to that of the wire center that satisfies the applicable behavioral criteria.

For switched access services, a remote switching module (RSM) is assigned to the market area of its host switch.[24] However, for the RSM to be included in the TMA, or certified as a CMA, for special access services, the RSM must satisfy the applicable behavioral criteria.

2. Price Management

a. Price Cap Basket Design

The current price cap basket design must be restructured. Rate elements can be

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[21] As the Commission has already recognized in its LEC Price Caps Order and, most recently, in its discussion in CC Docket No. 92-135, small and medium sized LECs are faced with unique circumstances as a result of their economic characteristics.

[22] Second Report and Order, 5 FCC Rcd. 6786, 6827 (1990), (LEC Price Caps Order).

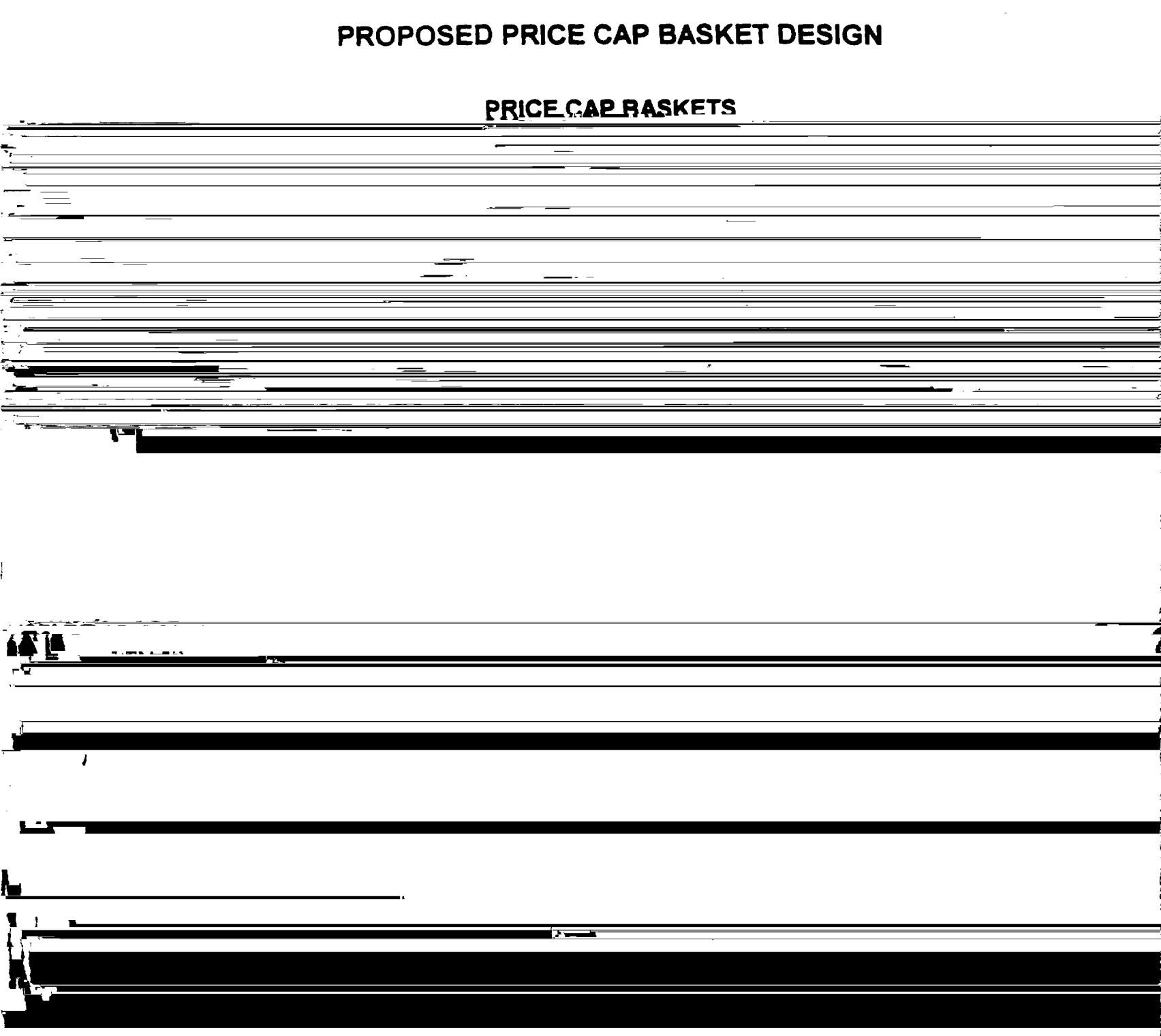
[23] Unique circumstances may exist such that a non-Tier 1 LEC may need to utilize the adjacency criteria for a wire center not directly contiguous to the wire center satisfying the behavioral criteria. In these rare instances, the non-Tier 1 LEC may file a waiver demonstrating that the competitive environment justifies use of the adjacency criteria in this manner.

[24] In the event that the RSM has been made capable of supporting expanded switched interconnection, then the RSM would be treated as a wire center for market classification purposes.

grouped for price management purposes into baskets which are consistent with the functional service groupings (i.e., access categories) proposed for Part 69. Figure 3 depicts the proposed price cap basket design.

The revised baskets would allow rates for equivalent functions, such as the current switched transport and special transport, to be grouped in the same basket. These baskets would also more readily accommodate new services such as ISDN, configurable private line, or software defined network offerings, which combine functions which would be considered "switched" and "special" under the current structure.

Figure 3: Proposed Price Cap Basket Design



Other - This basket could include:

- Interexchange
- Any other rate elements which do not fit in the Transport, Switching, or Public Policy baskets

A price cap category for each IMA would be established within the Switching basket and the Other basket. Separate Digital and Other price cap categories for each IMA would be established within the Transport basket. A single price cap category containing all applicable TMAs would be established within each basket. The Public Policy basket would not contain IMA and TMA category designations. However, separate price cap categories may be established for elements within the Public Policy basket. This price cap architecture would provide a safeguard against revenue shifting between the IMA and the TMA.

b. TMA and CMA Demand and Price Initialization

Separate prices will be established for services within an IMA, a TMA and a CMA. The methods for initializing demand and prices within a TMA and a CMA are detailed in Appendix D.

c. Ongoing Price Management

Price changes within the Public Policy basket and Public Policy access category would be subject to rules established specifically for each element. Price changes within IMAs and TMAs would continue to be subject to existing regulation, with increased pricing flexibility for the TMA as outlined below. As explained below, for price cap companies, the price cap indices limit price changes by restraining LECs' ability to increase IMA prices to offset declines in TMA prices. Non-price cap companies would be granted the pricing flexibility described below but would be constrained by traditional revenue requirement limits.

For price cap companies, price cap indices are established for each of the aforementioned baskets, except for the Public Policy basket. Consistent with current price cap regulation, the basket API cannot exceed the basket PCI. Individual IMA and TMA categories would have an upper limit of 5% relative to changes in the basket PCI.

The lower limit for TMA categories would be 15% while the lower limit for IMA categories would be 10%. A LEC may file below-band rates by producing an incremental cost study which demonstrates that the requested rates are above costs. Prices may be adjusted either upward or downward to the extent that they comply with all applicable pricing safeguards and rules.

Non-price cap LECs may increase individual rate elements by 5% per year in IMAs and in TMAs. A lower limit for price decreases is not necessary.[25] Rate changes cannot result in revenues exceeding the revenue requirement for the access category. Figure 4 depicts the proposed access category structure and price management guidelines for non-price cap LECs.

When service components traverse multiple market areas, the applicable price will be the lower price as determined by the two market areas in which the two endpoints for each service component are located.

Once a TMA has been established, price cap and non-price cap LECs would be able to respond to a request for proposal (RFP) from a customer with a contract tailored to meet the customer's needs. Rates for services in a CMA would be outside of the price cap plan, for price cap LECs. Market constraints would replace price caps as the control mechanism to ensure reasonable rates. However, these CMA services would continue to be regulated Title II communications services.[26] Contract carriage would be permitted for any service included in a CMA. The revenue and cost associated with TMA and CMA contracts would not be included in price cap or revenue requirement calculations for establishing average prices.

3. Filing Requirements

a. Notice Intervals for Filings

For all LECs, in-band pricing changes would continue to be filed on 14 days' notice. Annual and biennial filings would be filed on 90 days' notice. Filings which restructure

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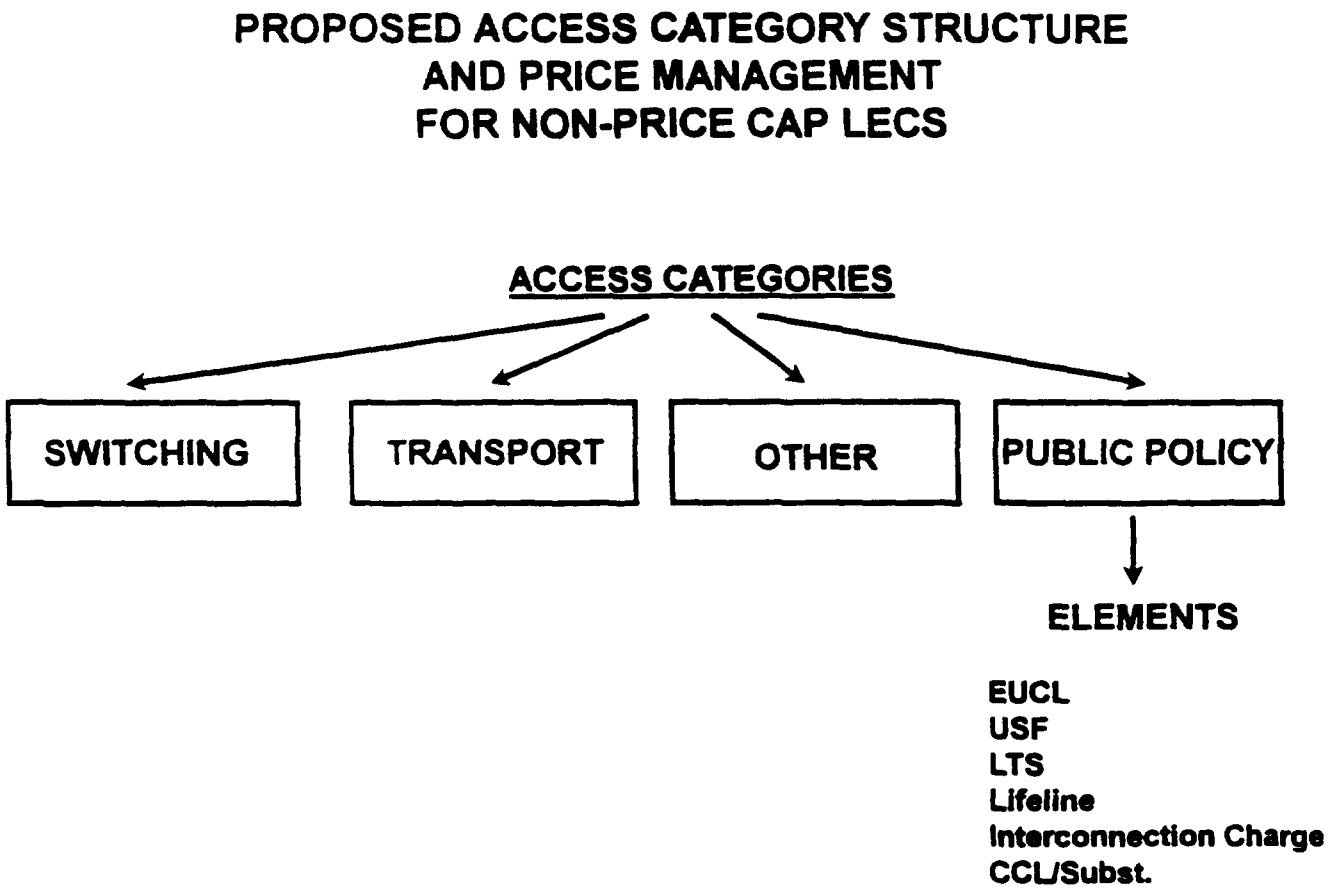
[25] USTA believes that a lower limit is not needed. Predatory pricing is not likely to occur because LECs under the incentive plan would generally utilize pricing flexibility to meet or approach the lower, non-predatory rates of price cap carriers. (Comments of the United States Telephone Association, CC Docket No. 92-135, August 28, 1992, pg. 18.)

[26] Title II requirements include tariff filings for CMA services and provide customers with potential regulatory relief through the complaint process.

Figure 4: Proposed Access Category Structure and Price Management for Non-Price Cap LECs



- ACCESS CATEGORY:
  Price changes cannot result in revenues exceeding the applicable revenue requirement for the Switching, Transport or Other access category.
  Rate elements are managed as follows:
    Upward price changes for each rate element limited to 5% per year.
    Downward price changes are not limited.
  Elements within the Public Policy access category are individually managed.

PUBLIC POLICY ELEMENT:
Rules established by Commission to manage each element.

existing services would be filed on 45 days' notice within the IMA and 21 days' notice within the TMA. New services filings would be filed on 21 days' notice if the revenues are considered to be de minimus[27]. If the revenues for the new service are not de minimus, the notice period would be 45 days. All other filings, including filings establishing prices for market areas and segments, would be filed with a notice period of 21 days.

b. Technical Publications

LECs typically do not burden their tariffs with the technical details associated with their services. The USTA Proposal for Streamlined Review of New Services, summarized in Appendix E, calls for the elimination of the need to file waivers of Part 61.74 of the rules to include references to technical publications in a tariff. USTA submits that this aspect of the proposal should be preserved with the implementation of access charge plan reform.

c. Cost and Demand Support

Figure 5 outlines the cost and demand support requirements for various filings, which affect rates and charges, for price cap and non-price cap LECs.

D. Public Policy Support Obligations

Historically, regulators have relied upon the traditional goal of "universal service at reasonable prices" as a guidepost when crafting many of their public policy decisions. This goal is consistent with statutory requirements of the Communications Act of 1934

Figure 5: Proposed Cost and Demand Support

Support Requirements for Price Cap LECs						
Type of Filing	Cost Support Requirements			Demand Support Requirements		
	IMA	TMA	CMA	IMA	TMA	CMA
In Band	None	None	N/A	Yes	Yes	N/A
Below Band	Inc	Inc	N/A	Yes	Yes	N/A
Annual	None	None	N/A	Yes	Yes	N/A
Restructure	None	None	N/A	Yes	Yes	N/A
New Services	61.38	NRT	None	Yes	Yes	None
Contract Services	N/A	NRT	None	N/A	Yes	None

Support Requirements for Non-Price Cap LECs						
Type of Filing	Cost Support Requirements			Demand Support Requirements		
	IMA	TMA	CMA	IMA	TMA	CMA
Rate Change	None	None	N/A	Yes	Yes	N/A
Biennial/Annual	61.38	61.38	N/A	Yes	Yes	N/A
Restructure	None	None	N/A	Yes	Yes	N/A
New Services	61.38	NRT	None	Yes	Yes	None
Contract Services	N/A	NRT	None	N/A	Yes	None

None: Indicates either cost or demand support is not required for the particular type of filing within that market area.
N/A: Indicates the particular type of filing is not applicable for that market area.
NRT: Indicates the use of a net revenue test is required.
Inc: Incremental Cost

with protection from competition.[29] Regulators also implemented a number of support mechanisms which assist with the cost recovery aspects of ubiquitously deployed services. In effect, regulators determined that the public interest benefits of being connected to the telephone network exceeded any detriments inherent in a monopoly market where prices were not solely premised on economic cost recovery principles.

More recently, federal and state regulatory agencies have initiated new policies designed to facilitate competitive entry into access service markets. Competitive entry results in LEC demand erosion as well as a need on the part of the incumbent service provider to establish prices more reflective of the cost of providing service. Moreover, insufficient depreciation rates place a further burden on LECs as they are saddled with the unrecovered costs of obsolete technology. These new procompetitive access policies are in conflict with traditional public policy goals. To solve this dilemma, regulators must, at a minimum, review current support mechanisms to ensure their continued viability and explore the need for additional explicit support mechanisms to replace those which are implicit in current access service prices. The following sections offer recommendations on existing support processes as well as new mechanisms designed to provide for continued public policy support in a competitive environment.

1. Modifications to Explicit Support Mechanisms

Regulators have implemented various cost recovery support mechanisms designed to offset some high cost aspects of providing universal service. These existing support mechanisms have been designed to recover specific, targeted costs and serve as stand-alone, explicit cost recovery mechanisms.

Some of these support mechanisms were recommended by the Joint Board and adopted by the Commission in CC Docket Nos. 80-286 and 78-72 to preserve universal service. Many of these support mechanisms were originally proposed as part of the Unity 1 and 1-A agreements (Appendices F and G). These agreements provide the current foundation for many inter-LEC relationships and regulatory rules which govern the support mechanisms. The Unity 1-A Agreement was particularly important in the establishment of support mechanisms that balanced the goals of the Commission, state regulators and the needs of small and large exchange carriers.

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[29] See for example: Remarks of Alfred C. Sikes, Chairman, Federal Communications Commission before the Centre for International Research on Communications and Information Technologies, presented in Melbourne, Australia on August 28, 1992.

Figure 6 highlights the current explicit universal service support mechanisms. In general, USTA believes these existing mechanisms are viable support measures and must be maintained with a few funding changes as outlined in Figure 6.

2. Modifications to Implicit Support Mechanisms

a. New Intra-Company Universal Service Support

New support mechanisms may be required to ensure that the Commission's universal service goal can be maintained in spite of its decision to accelerate the development of competition in the access services market. Customers should not be disadvantaged by the results of the Commission's procompetitive policies.

In addition to the explicit universal service support mechanisms described in the preceding section, the current access charge plan was crafted in such a way that access prices also implicitly support a LEC's intra-company universal service obligation. For example, broad geographic averaging of switching and transport prices serves to maintain equalized prices between high cost and low cost areas.

The switching and transport components of universal service provide for connectivity between all points on the telecommunications network. LECs incur substantial costs to provide this ubiquitous connectivity as a result of their obligation to serve or carrier of last resort requirement. This requirement has resulted and will continue to result in LECs making substantial investments in rural or high cost areas. The recovery of these costs poses significant problems for LECs since there are significant usage differences between rural and metropolitan areas. In rural areas, fixed costs typically must be recovered from smaller service volumes which result in a higher cost per unit and therefore leads to pricing and cost recovery problems. The implicit support mechanism which assists in the recovery of rural and high cost network connectivity is geographically averaged access pricing. Prices for low cost, high usage areas are presently the same as areas with high costs and low usage.

Access service price disparities between high cost and low cost areas may occur in a deaveraged price environment. If the Commission determines that these access service price disparities are contrary to public policy goals, an additional intra-company universal service support mechanism could be implemented. This mechanism would be used to replace the implicit support flows inherent in average pricing. If the Commission determines that a new support mechanism is needed, it should be designed to ensure no

Figure 6: Explicit Support Mechanisms and Proposed Changes

EXISTING MECHANISMS	RECOMMENDATIONS
Universal Service Fund (USF) Provides assistance to LECs with loop costs exceeding 115 percent of the nationwide average.	No change in qualification procedures because it is properly targeted to support universal service. Cost recovery should be expanded to include all service providers.
Linkup Assists qualified subscribers with the payment of telephone service establishment charges.	No change in qualification procedures as it is properly targeted at end users. Cost recovery should be expanded to include all service providers.
Lifeline Assists qualified subscribers by reducing end user common line (EUCL) charges.	No change in qualification procedures as it is properly targeted at end users. Cost recovery should be expanded to include all service providers.
Long Term Support (LTS) Keeps pooling LECs' carrier common line rates close to the nationwide average.	No change in qualification procedures but optional cost recovery mechanisms should be considered including the option for LECs to bulk bill to interexchange carriers (IXCs).
Carrier Common Line (CCL) Charges Recovers common line costs from interexchange carriers.	Alternatives to the CCL charge should be considered.[30] This could include recovery through flat rated elements.

[30] A surrogate CCL rate could still be calculated and reported to NECA for development of LTS funding amounts.

overlap with other support mechanisms. This type of mechanism should be optional, explicitly identified and intra-company in nature. Furthermore, this mechanism should be funded by all service providers based on criteria not associated with LEC services.

b. Modifications to the Capital Recovery Process

Depreciation rates have also been utilized by regulators as a tool to promote universal service.[31] LECs ubiquitously invested in their networks based on obligation to serve requirements. While the recovery of the investment was spread beyond normal economic lives, recovery was possible in the absence of competition. However, with increased competition and advancements in technology, the pressure for LECs to modernize their network has accelerated. Competitors providing all digital and fiber networks can force traffic off of LECs' embedded facilities, especially in high-volume traffic areas where it is cost efficient for the competitor to provide service. LECs are now faced with the problem of underdepreciated investment. The underdepreciation of this investment denies the public the full benefits of newer technologies and places LECs at a competitive disadvantage. For full competition to flourish and for the public to fully benefit from this full competition, LECs must not be burdened with this underdepreciated investment. This requires that LECs be afforded the opportunity to accelerate the

quantified and amortized over an appropriate period.

USTA also recommends that LECs should be given the responsibility and the flexibility to set their own depreciation rates. Under price caps, depreciation is treated as endogenous. Price cap LECs will have the incentive to use proper depreciation rates because understating depreciation will result in overstating earnings while overstating depreciation will adversely affect earnings. LECs under rate of return regulation also have incentives to recover capital at an appropriate rate, since under-recovery increases costs to the service rate base, thereby increasing financial and market risks, whereas over-recovery can unnecessarily deplete the rate base. Timing is the key consideration. In the end, LECs cannot recover more than they have invested and the deprecation rate merely determines the timing of the charge. LECs should be solely responsible for determining and submitting appropriate depreciation rates for prescription by the Commission.

Any required LEC filing should be streamlined to show only the depreciation rates and amortizations in effect, the proposed depreciation rates and amortizations, and the change in depreciation and amortization expense, as currently provided in Statements A and B of the traditional study support material. Under this proposal, the Commission can continue to meet its Communications Act obligation of giving notice and an opportunity to comment to the applicable state utility commissions through the current public notice process.

E. Elimination of Sharing for Price Cap Companies

When the Commission introduced price cap regulation its goals included incentives

Accordingly, LECs' ability to invoke the adjustment mechanism which allows LECs to automatically recover revenue shortfalls for those periods where revenues do not achieve a minimum rate of return should be eliminated. LECs may continue to file tariffs proposing rate changes when earnings are below an acceptable level. In those instances where the proposed rate changes exceed the PCI, the LEC must demonstrate the reasonableness of the proposed rate changes. Filings of this nature would not result in the LEC again becoming subject to unitary rate of return and its extensive cost support requirements.[35]

Price regulation gives LECs the incentive to increase efficiency and invest in the infrastructure because they have the opportunity to maximize the return on shareholder equity over the long run. In contrast, sharing diminishes this incentive as it requires LECs to forgo a share of earnings if prescribed levels are exceeded.

Deployment of new technology carries with it increased risk and uncertainty. LECs will be more likely to invest in emerging technologies with a presumptively higher risk under a regime where sharing has been eliminated if they are able to realize a higher return on their investment as a balance against the high risk.

Furthermore, price cap regulation, without sharing, will continue to protect consumers and will eliminate unnecessary vestiges of rate of return regulation such as cost allocation procedures, cost of capital calculations and other obsolete and cumbersome regulatory procedures. Price cap regulation ensures that LECs will not earn excessive rates of return and that rate payers will receive high quality, fairly-priced services.

VI. Conclusion

USTA proposes a comprehensive reform of interstate access based on a revised set of Commission policy objectives consistent with the rapidly changing telecommunications environment. Current, issue-focused Commission activity will not resolve the deficiencies

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[34](...continued)
and let the market regulate those prices that it can. And it's time to further streamline the process of regulation so it can cope with the new technologies and industry structure."

[35] As the Commission recognized in the price cap proceedings (See Second Report and Order, CC Docket No. 87-313, released September 19, 1990) additional consideration, especially for elective price cap LECs, may be necessary to address the potential for severe underearnings situations which could harm customers, as well as stockholders.

of the existing regulatory structure.[36]

USTA believes that a framework for the future should be based on the following principles: promote universal service, promote the introduction of new services and technologies, support balanced competition in access markets, promote efficient use of the network, encourage development of a national telecommunications infrastructure, prevent unreasonable discrimination, minimize regulatory burdens.

The reforms outlined in the proposal focus on providing structural flexibility, pricing flexibility and identifying a means to quantify and recover public policy support obligations.

USTA proposes that the Commission initiate a proceeding for a comprehensive review of the access structure. This review should be completed in and the proposals contained herein implemented prior to, or in parallel with the implementation of expanded interconnection for switched access.

USTA welcomes further discussion with current and potential access customers in all market segments, as well as other interested parties. Through such discussion, the proposal described herein can be refined and further developed. USTA believes that the entire telecommunications industry can benefit from access charge plan reform and commits its resources to developing and implementing a solution as soon as possible.

[36] Solutions designed in the current, more narrowly-focused dockets should be adopted as interim steps towards a comprehensive reform effort, and should be superseded by the new regulatory structure when it is adopted.

Appendix A: Sampling of Recent LEC Part 69 Waiver Requests to Establish New Rate Elements

Information Surcharge Rate Element

On December 3, 1990, Southwestern Bell requested a waiver of Part 69 of the Commission's Rules to permit the establishment of an Information Surcharge Rate Element within the Information category to recover certain costs associated with the publication of white pages. The waiver was approved, ten months later, on October 9, 1991. See Southwestern Bell Telephone Company Petition for Waiver of Part 69 of the Commission's Rules for Information Surcharge Element, Order, Released October 9, 1991.

Electronic White Pages

On May 18, 1990, U S WEST filed a petition for waiver of Part 69 of the Commission's rules to establish a new rate element and new subelements in the Information Element for its new Electronic White Pages service. The waiver request was granted by the Commission four months later on September 14, 1990.

On July 10, 1990, The New York Telephone Company and New England Telephone and Telegraph Company (NYNEX) filed a petition for waiver of Part 69 of the Commission's Rules to establish new rate elements for Electronic White Pages. Four months later, on November 27, 1990, the Commission granted the request.

On September 28, 1990, Cincinnati Bell Telephone Company (CBT) filed a Petition for Waiver of Part 69 of the Commission's Rules to establish a new Switched Access rate subelement in the Information element category of a proposed Electronic White Pages service. The waiver was approved five months later, on February 19, 1991. See Petition for Waiver of Part 69 of the Commission's Rules for Electronic Directory Assistance Service, Order, Released February 19, 1991.

Common Channel Signalling

On January 31, 1991, fourteen months following the filing, the Commission denied the Ameritech Operating Companies' request for a waiver of Sections(s) 69.4(b), 69.206, and Subparts B, D and E of Part 69 of the Commission's rules to permit the unbundling of

charges for the port that would be utilized by parties desiring access to the Companies' Signaling System 7 network. Such unbundling would have permitted the Companies to assess certain charges only on those end users causing the costs to be incurred.

On June 11, 1990, Southwestern Bell Telephone Company (SWBT) filed a petition for waiver of Part 69 of the Commission's rules to establish a new switched access rate element for its common channel signalling (CCS) interconnection service. On June 14, 1990, SWBT filed a petition for waiver of Part 69 to establish two new switched access rate elements for access to the data in SWBT's line identification database (LIDB). Sixteen months later, on October 4, 1991, the Commission conditionally granted the requested waivers. See Southwestern Bell Telephone Company Petitions for Waiver of Part 69 of the Commission's Rules, Memorandum Opinion and Order, Released October 4, 1991.

Operator Services

On October 12, 1989, Southwestern Bell filed a petition for waiver of Part 69 of the Commission's rules to establish separate rate elements for operator services provided to interexchange carriers (including 0- transfers). Seven months later, on May 31, 1990, the Commission granted the requested waiver.

On February 6, 1990, the Ameritech Operating Companies (Ameritech) filed a petition for waiver of Section 69.4(b) of the Commission's rules in order to establish separate rate elements for operator transfer services for its interexchange carrier (IEC) access customers. On March 5, 1991, thirteen months later, the waiver was granted. See Ameritech Operating Companies Petition for Waiver of Section 69.4(b) of the Commission's Rules, Memorandum Opinion and Order, Released March 5, 1991.

On January 29, 1990, NYNEX filed a petition for waiver of Section 69.4 of the Commission's rules to establish separate rate elements for Busy Line Verification and Busy Line Verification/Interrupt services. On March 5, 1991, thirteen months later, the waiver was conditionally granted. See New York Telephone Company and New England Telephone and Telegraph Company Petition for Waiver of Section 69.4(b) of the Commission's Rules, Order, Released March 5, 1991.

Switched 56 KBPS Service

On May 18, 1990, Rochester Telephone Company filed a petition seeking a waiver

of Section 69.4(b) of the Commission's Rules to permit Rochester to offer interstate switched 56 KBPS digital service. Four months later, on September 14, 1990, the Commission granted the waiver request.

Optional Switched Access Package with Volume Discount

[redacted]

Appendix B: New Technologies and Services Structure Issues

New Services Will Present Regulatory Challenges

Changes in technologies and services and in the Commission's policies for access services which have occurred since the access charge plan was developed in 1983 have caused the plan to become outdated. In reforming the access charge plan, consideration must be given to ensure that the plan is dynamic and flexible so that it does not once again become outdated.

Encouraging the introduction of new services and technologies is a stated objective of the Commission. Rapid changes in technology are making possible the development of a wide range of new access services. However, the existing framework of access rules impedes the development and introduction of these new services. Because the existing rate structure rules are prescriptive, they must be waived or changed to introduce new elements. As demonstrated in Appendix A, this traditionally has been a protracted process.

But the incompatibility of the rules with new services goes beyond the waiver process. Waivers have been delayed in part because the access structure itself is too rigid, and new services do not fit logically into the structure. Each petition has therefore created issues of service classification or consistency with the existing structure. As the new services differ more and more from the 1983 technology embedded in the rules, customers will increasingly be frustrated in obtaining the telecommunications services they desire.

New services which provide private line functions using shared, switched resources under software control will appear to be "switched" services under current definitions. However, the rate structures prescribed for the current switched services may be incompatible with these offerings. The switched access rules also provide only for two-point service, while some offerings will involve multipoint bridging arrangements. Some new services will provide both dedicated bandwidth, like today's special access services, and usage-based functions similar to today's switched access, on an integrated basis. These services "straddle" the current switched and special categories; yet, depending on which category they are placed in, very different cost allocation and pricing requirements would apply. Current rules also make it difficult to interconnect switched and special

services. This has led to limitations in the arrangements customers could establish using the new integrated services. Other services are simply not addressed in the current structure.

Assumptions built into the existing rules may also result in rates for some new services which are severely distorted from the level a market outcome would produce, therefore discouraging LECs from proposing such services. Current rules for switched services, for example, call for rates to be based on relative usage or equivalent voice grade channel capacity.

The rules also limit customers' ability to request and receive new service packages which meet their particular needs, and which are priced to be economically efficient. As AT&T has shown with its optional calling plans, such packages can significantly expand the range of choices available to customers. They can also be vehicles for introducing more efficient, non-uniform pricing structures. However, the difficulty of obtaining waivers for new rate elements, the requirement for study area averaging, and the Commission's past unwillingness to permit volume discounts for switched access services, forestall the development of new package options.

Telecommunications customers increasingly demand expanded capabilities: from voice communications to transmission and processing of information (i.e., voice, data, image) among terminals and databases; from providing transport services to providing network capabilities; from standardized services to market or customer specific offerings; from carrier control to customer control; from local to global services. User-switched, two-way fully interactive video conferencing networks are replacing video-tape production and one-way visual communication in the business, education, and government market sectors. While telephone companies, cable systems and other service providers seek to meet these market demands, regulatory rules, as opposed to customer choice, dictate which ones will be the market providers. This precludes economically efficient competition.

By the year 2000, end users may see cellular telephony as a complement or even successor to conventional phone services. The mobility of wireless technology will allow for the evolution of personal communications networks (PCNs). The assignment of a number to each person will allow the person to answer a call anywhere. Ubiquitous PCNs depend on cooperation among many service providers -- LECs, interexchange carriers, cellular and paging operators, additional PCN operators, customer premises equipment suppliers -- as well as regulators. Calls will transit multiple networks destined

for switching transfer points where routing information will be stored to control the switching and routing of the call.

Services which are being considered for introduction in the next decade include the following:

Customer Service - a set of inbound telemarketing capabilities which enable a telemarketer to display the calling customer's client information, and perform interactive call routing, selective call treatment and network-to-user signaling.

These new switched access offerings could be built on new or restructured basic service elements (BSEs), which would require FCC waivers. A new BSE must be approved under the process outlined in Part 69.119 of the Commission's rules prior to a tariff filing.

Transaction Processing - on line information processing supporting standard business transactions like credit card authorization and Automatic Teller Machine transactions.

This service may include dedicated connections to a data base such as the Line Information Database (LIDB) and may include a look-up in the data base.

Switched High Speed Service - a switched n x 1.544 Mbps service in support of point to point and point-to-multipoint transmission.

The switching arrangement may be considered switched access, and if so, a Part 69 waiver will be required to establish rate elements. In addition, while the Commission's policies have historically required usage based rate elements for switched services, switched high speed service may more appropriately be offered on a flat rate or some other basis. These rules also do not currently provide for serving arrangements which combine a switched service with existing special access services.

Switched Multi-megabit Digital Service (SMDS) - a high speed public packet service which provides local area network-like performance and features over a wide area.

Packet Service is not addressed in Part 69 Rules. As a switched service, waivers of local switching and switched transport (Rules 69.106, 69.111 and 69.112) may be

required. This service raises issues similar to those raised by switched high speed service.

Switched Fractionalized 1.544 Mbps Service - includes Non-ISDN switched 1.536 Mbps service, ISDN switched .384/1.536 Mbps service, and ISDN n x 64 fractional 1.544 Mbps service.

Averaged rates, based on previous cost allocations, for existing elements (e.g. channel terminations) may not be consistent with market prices for these newer services. Competitive rates may be prohibited without waivers. The classification of these services between the current switched and special categories is also not clear.

Multimedia Conferencing Service - transport switching and bridging of audio and video information streams.

It is not clear how the existing rules for switching and switched transport services would apply to this offering. Current rates, applied to the throughput associated with this service, would lead to rates which would not be acceptable in the marketplace.

Customer Network Management - information on circuit performance, control of service parameters and control of bandwidth provided directly to the customer for both switched and special access capabilities.

The current rules do not accommodate services which can be used for both switched and special applications under customer control.

Video Delivery - the use of video delivery networks with video transfer rates between 3 and 6 Mbps to deliver high quality video images.

The current rules do not provide for facilities used jointly for both video and POTs services.

Personal Access Service - use of a North American Number Plan based number to facilitate the receipt of incoming calls while permitting the subscriber to be away from their primary station.

The current rules do not accommodate the assignment of the infrastructure required to implement personal access service (e.g. SS7 signalling and data base).